

Serial No.: 09/686,516  
Attorney Docket No.: BL055-GN004  
Amendment

### **REMARKS**

Claims 2, 4, 5, 13, 14, 40, 41, 49, 50 and 75-82 are currently pending in the Application. Claims 2, 4, 13, 40, 49, 76, and 78 have been amended herein. New claim 82 has been added. All other pending claims remain in their original or previously amended form. Reconsideration of the Application is respectfully requested.

#### **I. Rejections Under 35 U.S.C. § 112**

Claims 76 and 78 stand rejected under the second paragraph of 35 U.S.C. § 112 for allegedly failing to provide proper antecedent basis for the term "relevance score." These claims have been amended to change the word "the" to "a" immediately preceding "relevance score," thereby providing the proper antecedent basis. Applicant respectfully requests that the rejection be withdrawn.

#### **II. Rejections Under 35 U.S.C. § 102(b)**

Claims 2 and 79 stand rejected as allegedly being anticipated by the eWatch website service, as archived on May 22, 1998.

Independent claim 2, as amended, is directed to a method for collecting and analyzing electronic discussion messages; wherein the method comprises the steps of: (a) collecting a plurality of message information from a plurality of pre-determined electronic discussion forums; (b) storing the plurality of message information in a central data store; (c) categorizing the message information according to a plurality of pre-determined rules; (d) assigning an opinion rating to the plurality of message information based on sentence-level analysis using a plurality of pre-determined linguistic patterns and associative rules; (e) collecting a plurality of objective data from a plurality of objective data sources; (f) analyzing the message information and the objective data to identify trends in the pattern of behavior in pre-determined markets and the roles of individual participants in electronic discussion forums; and (g) generating reports for end-users based on the results of the analyses performed by the present invention.

##### **A. New Limitations Added to Claim 2 by Amendment**

This claim has been amended to provide that, in the step (d) of assigning an opinion rating, the plurality of pre-determined linguistic patterns and associative rules are

Serial No.: 09/686,516  
Attorney Docket No.: BL055-GN004  
Amendment

applied in a sentence-level analysis. This limitation is supported by the specification at page 15, line 15 through page 16, line 6. This added limitation is clearly absent from the eWatch reference and thus renders claim 2 novel. The cited eWatch reference materials, which consist of news articles about eWatch, explain that eWatch can perform keyword searches, "perhaps a client's name, combined with 'boycott,' 'angry,' or even cruder denigrating terms." (eWatch news articles, p.23) Even if this word-search feature of eWatch constitutes "pre-determined linguistic patterns and associative rules," however, the eWatch reference materials contain absolutely no mention of any capability to analyze language at the sentence level, as required by amended claim 2.

**B. The cited eWatch reference is not enabling.**

The eWatch reference cited by the Office action does not enable a person skilled in the art to practice the claimed invention, which renders it legally insufficient as a prior art reference. In response to Applicant's previous assertion of this argument, the Office action apparently contends that a loosened standard of enablement is applied to software-related inventions. While it may well be correct, as the Office action notes, that specific source code need not be disclosed to enable a software invention, the specific functions or steps performed by the software must be disclosed.

The Federal Circuit cases cited in the Office action do not support such a loosened standard of enablement for software-related inventions. In fact, *Fonar Corp. v. General Electric Co.*, 107 F.3d 1543, 41 U.S.P.Q.2d 1801 (Fed. Cir. 1997), does not even address the enablement requirement at all. The *Fonar* case was decided on the best mode requirement of 35 U.S.C. § 112, and the court explained that "where software constitutes a part of a best mode of carrying out an invention, description of such a best mode is satisfied by a disclosure of the *functions of the software*." *Id.* at 1549 (emphasis added). Thus, while "flow charts or source code listings are not a requirement," the "functions of the software" must be adequately disclosed. *Id.* In the case of *In re Hayes*, 982 F.2d 1527, 25 U.S.P.Q.2d 1241 (Fed. Cir. 1992), the court addressed the written description requirement of 35 U.S.C. § 112 as applied to an invention embodied in a microprocessor. The court observed that specific programming code need not be disclosed because "[o]ne skilled in the art would know how to program a microprocessor to perform the necessary

Serial No.: 09/686,516  
Attorney Docket No.: BL055-GN004  
Amendment

steps described in the specification.” *Id.* at 1534. Central to this holding is the underlying requirement that the specific functions to be performed must be disclosed, because a person skilled in the art would need to know what functions are to be performed in order to write code to perform those functions. As explained by the court, this requires disclosure of “a microprocessor having certain capabilities and the desired functions it was to perform.” *Id.*

The eWatch references cited in the Office action fail this requirement because they do not recite specific functions to be performed. The news articles about eWatch discuss the business goals of the eWatch service, one of which is to identify messages that contain words expressing positive or negative opinions about a particular company. These news articles, however, do not explain how eWatch purportedly does this; they only contain statements that this is a business goal of eWatch, such as:

- “These days, eWatch’s proprietary software does the first round of filtering, churning out reports based on keywords – perhaps a client’s name, combined with ‘boycott,’ ‘angry,’ or even cruder denigrating terms.” (eWatch news articles, p.23)
- “To help companies combat negative publicity and even track the good comments, a 2-year-old company called eWorks! offers a service that monitors the Web for any mention of its clients.” (eWatch news articles, p.28)

After reading these articles, one would need to start virtually from scratch in order to implement the claimed invention because the news accounts of eWatch’s business do not describe the steps or functions that implement these goals. Without any description of the specific functions that must be performed by the software, a software engineer would need to independently develop (i.e. conceive or invent) those functions before he or she could begin writing code to implement the desired goals. Because the specific functions underlying the desired goals are missing from the eWatch news articles, these reference materials are legally insufficient as a prior art reference.

Claim 79 depends from claim 2 and is therefore allowable for the same reasons stated above.

Serial No.: 09/686,516  
Attorney Docket No.: BL055-GN004  
Amendment

For the foregoing reasons, claims 2 and 79 are in condition for allowance, and Applicant respectfully requests that the rejection be withdrawn.

### III. Rejections Under 35 U.S.C. § 103(a)

Claims 4, 13, 14, 40, 49, 50, 80, and 81 stand rejected as allegedly being obvious from the eWatch reference in view of the CyberSleuth reference. Claims 5, 41, and 75-78 stand rejected as allegedly being obvious from the eWatch reference in view of the CyberSleuth reference in further view of U.S. Patent No. 6,067,539 ("Cohen").

#### A. Claims 4 and 5

Independent claim 4, as amended, is directed to a system for processing message traffic in a plurality of electronic discussion forums, comprising: a message collector for collecting messages from the plurality of electronic discussion forums; a message categorizer for processing the messages based on a series of topics; and a data analyzer for tracking message content posted by a plurality of pseudonyms and the roles of individual participants using the pseudonyms posting in the plurality of electronic discussion forums over time based on the processing of the messages; wherein the message collector communicates with a database storing configuration information for the plurality of electronic discussion forums, thereby enabling the message collector to collect messages corresponding to a plurality of message formats or communications protocols.

Claim 4 has been amended herein to provide that the data analyzer tracks the roles of individual participants using the pseudonyms posting in the plurality of electronic discussion forums over time. As discussed above, this feature of tracking how a forum participant's role or impact changes over time is absent from the cited eWatch references. Additionally, this feature is absent from CyberSleuth, which is directed to a completely different problem. CyberSleuth provides a method for discovering the true identity of a person who is posting to a discussion forum under a particular screen name. The Office action cites to a printout of an e-mail message in which the author discusses the CyberSleuth service, stating that "eWatch CyberSleuth will attempt to identify the entity or entities behind the screen name(s) which have targeted your organization."

Serial No.: 09/686,516  
Attorney Docket No.: BL055-GN004  
Amendment

(CyberSleuth reference, ¶ 6) CyberSleuth does not track the roles of individual participants using the pseudonyms over time, as required by amended claim 4. The method performed by the present invention is not concerned with discovering the true identity behind a pseudonym (CyberSleuth's goal) at all. Rather, the present invention provides a system to analyze the way in which messages posted by individual forum participants influence the discussion in that forum or external events. This feature is completely absent from CyberSleuth.

Claim 4 has been further amended to provide that the message content posted by a plurality of pseudonyms is tracked. This added limitation leaves no doubt that the present invention goes beyond CyberSleuth, which tracks merely the pseudonyms themselves in order to discover the true identity behind the person using them.

Because this feature of tracking message content and the roles of individual participants using the pseudonyms posting in the plurality of electronic discussion forums over time is not taught by either eWatch or CyberSleuth, claim 4 is not obvious from this combination of references.

Claim 5 depends from claim 4 and is therefore allowable for the same reasons.

**B. Claims 13 and 14**

Independent claim 13, as amended, is directed to a system for processing message traffic in a plurality of electronic discussion forums, comprising: a message collector for collecting messages from the plurality of electronic discussion forums; a message processor for processing the messages according to a series of topics, wherein the message processor processes a message to compute a relevance of the message to at least one topic from the series of topics; and a data analyzer for tracking message content posted by a plurality of pseudonyms posting in the plurality of electronic discussion forums over time based on the processing of the messages; wherein the message processor processes the messages to compute an opinion for the message based on sentence-level analysis using a plurality of pre-determined linguistic patterns and associative rules according to the at least one topic.

This claim has been amended to include the new limitations discussed above, requiring that message content be tracked and that the roles of individual participants

Serial No.: 09/686,516  
Attorney Docket No.: BL055-GN004  
Amendment

using the pseudonyms posting in the plurality of electronic discussion forums over time be tracked, and requiring that the plurality of pre-determined linguistic patterns and associative rules are applied in a sentence-level analysis. As discussed above, these features are not taught by eWatch or CyberSleuth. Accordingly, for the same reasons discussed above, claim 13 is in condition for allowance.

Claim 14 depends from claim 13 and is therefore allowable for the same reasons stated above.

**C. Claims 40 and 41**

Independent claim 40, as amended, is directed to a method for processing message traffic in a plurality of electronic discussion forums, comprising the steps of: collecting messages from the plurality of electronic discussion forums; processing the messages based on a series of topics; tracking message content posted by a plurality of pseudonyms and the roles of individual participants using the pseudonyms posting in the plurality of electronic discussion forums over time based on the processing of the messages; and storing configuration information for the plurality of electronic discussion forums in a database, and wherein the step of collecting messages comprises collecting messages corresponding to a plurality of message formats or communications protocols.

This claim has been amended to include the new limitations discussed above, requiring that message content be tracked and that the roles of individual participants using the pseudonyms posting in the plurality of electronic discussion forums over time be tracked. As discussed above, these features are not taught by eWatch or CyberSleuth. Accordingly, for the same reasons discussed above, claim 40 is in condition for allowance.

Claim 41 depends from claim 40 and is therefore allowable for the same reasons.

**D. Claims 49-50**

Independent claim 49 is directed to a method for processing message traffic in a plurality of electronic discussion forums, comprising the steps of: collecting messages from the plurality of electronic discussion forums; processing the messages according to a series of topics and computing a relevance of the messages to at least one topic from the series of topics; and tracking message content posted by a plurality of pseudonyms

Serial No.: 09/686,516  
Attorney Docket No.: BL055-GN004  
Amendment

posting in the plurality of electronic discussion forums over time based on the processing of the messages; wherein the processing step further comprises the step of computing an opinion for the message based on sentence-level analysis using a plurality of pre-determined linguistic patterns and associative rules according to the at least one topic.

This claim has been amended to include the new limitations discussed above, requiring that message content be tracked and that the roles of individual participants using the pseudonyms posting in the plurality of electronic discussion forums over time be tracked, and requiring that the plurality of pre-determined linguistic patterns and associative rules are applied in a sentence-level analysis. As discussed above, these features are not taught by eWatch or CyberSleuth. Accordingly, for the same reasons discussed above, claim 13 is in condition for allowance.

Claim 50 depends from claim 49 and is therefore allowable for the same reasons.

**E. Claims 75-78**

Each of claims 75-78 and 80-81 depends from one of claims 4, 13, 40, and 49. These base claims have been amended, as discussed above, to add new limitations that render them novel over the cited references. Accordingly, for the reasons stated above, each of the independent base claims is in condition for allowance. Each of dependent claims 75-78 and 80-81 contains all the limitations of its base claims and is therefore allowable for the same reasons.

**IV. New Claim 82**

New claim 82 depends from claim 2 and contains additional limitations requiring that, in the analyzing step (f), the analysis is performed on a time series comprising the message information and the objective data to identify trends in the pattern of behavior in pre-determined markets and the roles of individual participants over time in electronic discussion forums. This limitation is supported by the specification at page 2, line 22 through page 3, line 7. This added limitation is clearly absent from the eWatch reference and thus renders claim 82 novel. Even if eWatch's reference to monitoring electronic discussion forums for both positive and negative "buzz" can be construed as "identifying trends" (as the Office action does on pp.4-5), and even if "trend" is given a broad interpretation (as the Office action does on p.4), eWatch does not teach this new

Serial No.: 09/686,516  
Attorney Docket No.: BL055-GN004  
Amendment


limitation of analyzing a time series of message information and data to discern individual forum participants' impact over time on an event or forum discussion. eWatch may be able to make associations between a message and an item or event discussed therein (such as a stock price), but the cited eWatch materials contain no discussion of tracking a time series of data to determine how a forum participant's role or impact changes over time. Accordingly, claim 82 is allowable over the cited references.

#### IV. Conclusion

In light of the foregoing, it is respectfully submitted that claims 2, 4, 5, 13, 14, 40, 41, 49, 50, and 75-82, now pending as amended, are distinguishable from the references cited, and in condition for allowance. Reconsideration and withdrawal of the rejections of record is respectfully requested.

If the Examiner wishes to discuss any aspect of this response, please contact the undersigned at the telephone number provided below.

Respectfully submitted,



Daniel F. Oberklein  
Reg. No. 56,426

30074  
Taft, Stettinius & Hollister LLP  
425 Walnut Street; Suite 1800  
Cincinnati, Ohio 45202-3957  
oberklein@taftlaw.com  
(513) 357-9693